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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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2100 Pennsylvania Avenue, N.W.
Washington, DC 20037

EXAMINER

EDWARDS, PATRICK L

ART UNIT	PAPER NUMBER
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2621

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/933,758

Applicant(s)

KUSUNOKI, NAOKI

Examiner

Patrick L Edwards

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☒ Claim(s) 10, 14 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claims 10 and 20 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 10 and 20 are redundant in that they simply re-recite limitations from claims that they are dependent from. Claim 10 simply restates limitations of claim 1, and claim 20 restates limitations from claim 14.

2. Claim 14 is objected to because of the redundant phrase "cropping area being to be scanned". Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Daniels et al. (USPN 6,643,416 B1).

With regard to claim 1, Daniels discloses an image input device for entering image data from an original image (the scanner 32 shown in Figure 1), an image processing device for processing said image data to produce an output image (the microprocessor based unit 12 shown in Figure 1) and an image output device for outputting said output image (the printer 28 shown in Figure 1),

Daniels further discloses automatically adjusting an input resolution of said image input device (col. 4 lines 34-36). Figure 1 of Daniels shows a computer system for implementing the adjustment of the input resolution. Consequently, Daniels discloses the "resolution adjusting device" recited in the claim. Daniels further discloses that this adjustment is performed in accordance with the following parameters.

a) an output resolution of said image output device (col. 7 line 55). It is well known in the art that the output resolution of a printer is determined by its modulation transfer function. This is clearly explained on page 2,

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paragraph 3 of the "OKI Technical Review", which has been included as a reference which shows the connection between printer resolution and printer MTF.

b)a size or data pixel number of said output image (col. 4 lines 40-42). The print size disclosed in Daniels is analogous to the size of the output image as recited in the claim.

c)a size of said original image or a data pixel number of said image file (col. 4 line 40). The 'crop amount' disclosed in Daniels is analogous to the 'size of the original image' as recited in the claim. It corresponds to the area of the original image that will be read out by the scanner.

With regard to claim 2, Daniels discloses a monitor for displaying an image as entered through the input device (element 14 of Figure 1). With regard to the further limitation of claim 2 which recites a 'crop boundary' that designates a 'cropping area', Daniels discloses that the crop coordinates (which define a cropping area) are determined by a crop box (col. 9 lines 45-46). The "crop box" disclosed in the Daniels reference is analogous to the "crop boundary" recited in the claim.

With regard to claim 3, Daniels further discloses a device for modifying the size or position of the crop boundary on the monitor (col. 3 lines 53-57 with Figure 1 and col. 9 lines 45-46). The mouse 18 shown in Figure 1 of Daniels qualifies as such a device.

With regard to claim 4, Daniels further discloses an input device for entering an image from an image file (col. 4 lines 19-26 in conjunction with Figure 1). The images stored on the PC card 30, the floppy disk 26 or compact disk 24 as disclosed in Daniels are analogous to 'an image from an image file' as recited in the claim.

With regard to claim 5, all of the limitations of the claim were discussed in the above claim 1 arguments.

With regard to claim 6, Daniels discloses a plurality of predetermined input resolutions available for the scanner (col. 5 lines 20-26). Daniels further discloses setting the scanner to a predetermined input resolution that is nearest to the calculated resolution (col. 5 lines 20-26).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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6. Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels et al. (USPN 6,643,416) in view of Parulski (USPN 5,301,244). The arguments as to the relevance of Daniels as applied in the paragraphs above are incorporated herein.

With regard to claim 14, Daniels discloses a scanner, a monitor, an image processing device and a printer. Daniels also discloses designating a cropping area from an original image to be scanned in a fine scanning mode (i.e. the hardcopy representation of the image). Daniels also discloses a resolution setting device for obtaining the optimum resolution for fine scanning the cropped area of the original image. Figure 2 of the Daniels reference shows that the cropping operation is performed on an original image which is provided (see steps 42 and 44). Daniels fails to expressly disclose that this provided original image is a low resolution preview image obtained in a pre-scanning mode of the scanner.

Parulski, however, discloses a scanner with a pre-scanning mode which provides low resolution images that are used for image composition (col. 2 lines 51-54). The disclosed image composition process includes designating a cropping area of the image (col. 7 lines 51-52). Parulski further discloses a final scanning mode for scanning the composed image in high resolution (col. 2 lines 54-56).

It would have been obvious to one reasonably skilled in the art at the time of the invention to modify the imaging system disclosed in the Daniels reference by equipping the scanner with a low-resolution pre-scanning mode, so that the process of designating a cropping area could be performed on a lower resolution preview image as taught by Parulski. Such a modification would have allowed for a more efficient system that provided the original images (step 42 of Figure 2 in the Daniels reference) at a much faster rate (Parulski col. 6 lines 65-68).

With regard to claim 15, the further limitations of the claim have been discussed in the above argument with respect to claim 6.

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels et al. (USPN 6,643,416) in view of Gillman et al. (USPN 6,208,770). The arguments as to the relevance of Daniels as applied in the above paragraphs are incorporated herein.

With regard to claim 22, Daniels discloses an image input device for entering image data from an external storage device, but fails to expressly disclose that the external storage device stores both full-dressed image data and thumbnail image data. Daniels also fails to expressly disclose that the cropping area designation operation is performed on a thumbnail image.

Gillman, however, discloses an external storage device that stores both full-dressed image data and thumbnail image data (Gillman col. 5 lines 20-26). The combination of compact disc 19 and computer disc 18 as disclosed in Gillman is analogous to the "external data storage device" recited in the claim. Gillman further discloses designating a cropping area on a displayed thumbnail image (Gillman col. 5 lines 37-40).

It would have been obvious to one reasonably skilled in the art at the time of the invention to modify the imaging system disclosed in the Daniels reference by storing both thumbnail images and full sized ("full-dressed")

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images in an external storage device and performing the cropping operation on the stored thumbnail images as taught by Gillman. Such a modification would have allowed for an imaging system that additionally stored both the full size image data and the corresponding thumbnails in memory and consequently allowed a user to preview several images before performing a cropping operation on one of them (Gillman col. 5 lines 32-36).

8. Claims 7-10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels as applied to claim 2 above, and further in view of Gillman et al. (USPN 6,208,770). The arguments as to the relevance of Daniels as applied in the above paragraphs above are incorporated herein.

With regard to claim 7, Daniels discloses designating cropping areas for original images, but fails to expressly disclose producing a synthetic output image by pasting cropping areas into pasting frames of a synthetic image template.

Gillman, however, discloses pasting cropping areas into pasting frames of a template image in order to produce a synthetic image (Gillman col. 5 lines 61-63 in conjunction with Figure 6).

It would have been obvious to one reasonably skilled in the art at the time of the invention to modify the imaging system disclosed in the Daniels reference by allowing the cropped areas to be pasted into a template layout as taught by Gillman. Such a modification would have allowed for the production of a customized composite image which comprised the best possible prints (Gillman col. 2 lines 14-25).

With regard to claim 8, Gillman further discloses a monitor with a sub-display area for displaying a template layout (Gillman col. 5 lines 49-53 in conjunction with Figure 6). The "print function display screen" disclosed in Gillman qualifies as the claimed sub-display area.

Further referring to claim 8, Gillman discloses that the images corresponding to cropped areas have a shape which is similar to the pasting frames that they are being pasted into (Gillman col. 5 line 63 – col. 6 line 2).

With regard to claim 9, Gillman further discloses modifying the size or position of the pasting frames of the template (Gillman col. 5 lines 56-60). In customizing the template layout, the user is modifying the size or position of the claimed "pasting frames" of the template.

With regard to claim 10, no further limitations are added to the claim. Consequently, all of the claim limitations have been previously addressed.

With regard to claim 13, Gillman further discloses storing the synthesized the image as a digital file (Gillman col. 2 lines 37-41). This file consists of the respective images of the composite print and their position data on the print (col. 6 lines 20-35).

9. Claims 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Daniels and Parulski as applied to claim 16 above, and further in view of Gillman et al. (USPN 6,208,770). The arguments as to the relevance of this combination as applied in the above paragraphs are incorporated herein.

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With regard to claims 16 and 17, the further limitations of the claim have been discussed with respect to claim 7 above.

With regard to claim 18, the further limitations of the claim were discussed with respect to claim 8 above.

With regard to claim 19, the further limitations of the claim were discussed with respect to claim 9 above.

With regard to claim 20, no further limitations are added to the claim. Consequently, all of the claim limitations have been previously addressed.

10. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Daniels and Gillman as applied to claims 7 and 9 above, and further in view of "Inside Adobe Photoshop 5", which will be referred to herein as simply 'Adobe'.

With regard to claim 11, Adobe discloses changing the size of a pasting frame after an image has been pasted into it (Adobe page 283 with Figure 9.20). Increasing the size of the pasting frame will increase the output size of the image (i.e. the "cropping area"). Daniels teaches that the input resolution is dependent on the size of the output image. Consequently, the combination of Daniels, Gillman and Adobe teaches all of the limitations of the claim. It would have been obvious to one reasonably skilled in the art at the time of the invention to modify the imaging system disclosed in the combination of Daniels and Gillman by allowing for size or shape modification of a pasting frame after the image has been pasted. Such a modification would have allowed for an additional image editing tool which would have made for a more robust and powerful imaging system.

With regard to claim 12, Adobe further discloses a template layout with an outer frame and an inner frame (Adobe pages 346-347). The boundary of the man holding the laser pistol shown in Figures 12.1 and 12.2 is an example of an inner frame. The picture of the man himself is analogous to a first image as recited in the claim. The boundary of the images as a whole is analogous to the claimed outer frame. It follows that the respective background images shown in these two Figures are analogous to the second image as recited in the claim. Adobe discloses that the resolution of the first image is adjusted according to the second image (Adobe page 346 last paragraph - page 347 first paragraph). It would have been obvious to one reasonably skilled in the art at the time of the invention to modify the imaging system disclosed in the combination of Daniels and Gillman by varying an inner frame resolution in accordance with the resolution of the outer frame so that the inner frame is superimposed onto as taught by Adobe. Such a modification would have allowed for composite images which appeared more realistic looking in that the foreground and background had compatible resolutions.

11. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Daniels, Parulski and Gillman as applied to claim 20 above, and further in view of "Inside Adobe Photoshop 5", which will be referred to herein as simply Adobe.

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With regard to claim 21, the further limitations of the claim were discussed with respect to claim 11 above.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kluck et al. (USPN 6,388,679), which optimizes a display based on resolution settings. Jia et al. (USPN 6,430,320), which teaches controlling the resolution of an automatic image cropping operation. Nelson et al. (USPN 6,431,448), teaches pasting images into pasting frames defined by an image template.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick L Edwards whose telephone number is (703) 305-6301. The examiner can normally be reached on 8:30am - 5:00pm M-F.

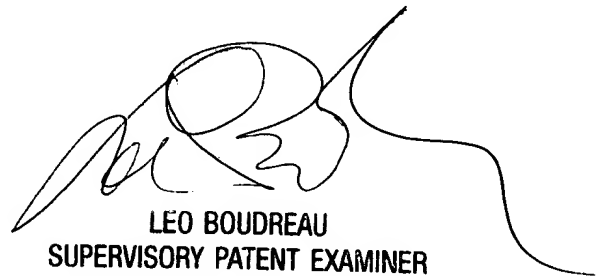
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Patrick Lynn Edwards

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